

Title (en)
POWDER VALVE

Title (de)
PULVERVENTIL

Title (fr)
VALVE À POUDRE

Publication
EP 1991802 A4 20130306 (EN)

Application
EP 07702504 A 20070223

Priority
• DK 2007000086 W 20070223
• DK PA200600256 A 20060223

Abstract (en)
[origin: WO2007095951A1] The present invention concerns a valve (1), a valve closing body (14) and use of a valve (1) and a valve closing body (14) of the type used for injecting dry powder which is mixed with liquid, and where the dry powder is supplied under the liquid surface in a mixing vessel (11) in which a vacuum is typically maintained. The novel feature of a powder valve (1) according to the invention is that a closing body (14) of the valve in the closed position extends through the valve seat (13) of the valve and into the wet environment. It is hereby achieved that when the valve (1) is opened, powder or dust from powder is not deposited on the valve closing body (14). This is in spite of the valve closing body (14) being wet, due to contact with the liquid to which the powder is added. Due to its elongated shape, the valve closing body (14), which in the withdrawn position opens for inflow of powder, has the property that the inflowing powder dries the valve closing body (14) at first and keeps it dry subsequently.

IPC 8 full level
F16K 1/12 (2006.01); **B65D 83/06** (2006.01); **B65D 90/58** (2006.01); **B65D 90/62** (2006.01); **F16K 1/36** (2006.01); **F16K 27/02** (2006.01)

CPC (source: EP US)
F16K 1/12 (2013.01 - EP US); **F16K 1/36** (2013.01 - EP US); **F16K 27/0254** (2013.01 - EP US); **Y10T 137/4259** (2015.04 - EP US); **Y10T 137/4891** (2015.04 - EP US); **Y10T 137/86815** (2015.04 - EP US); **Y10T 137/86879** (2015.04 - EP US)

Citation (search report)
• [X] US 3429331 A 19690225 - PREVOST ROBERT
• [X] FR 2169060 A1 19730907 - CAFE BAR LTD [GB]
• [X] US 4162795 A 19790731 - KANICS ANDRAS [DE]
• [X] EP 1574764 A2 20050914 - WOODWARD GOVERNOR CO [US]
• [X] DE 4112885 A1 19921022 - MOLERUS OTTO PROF DR ING [DE], et al
• [X] FR 2587780 A1 19870327 - RHONE POULENC INGENIERIE [FR]
• See references of WO 2007095951A1

Citation (examination)
• US 4599363 A 19860708 - MILES JR JOHN J [US], et al
• US 3845788 A 19741105 - LAVEN T

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007095951 A1 20070830; CA 2642307 A1 20070830; CA 2642307 C 20140729; EP 1991802 A1 20081119; EP 1991802 A4 20130306; JP 2009527705 A 20090730; JP 5313696 B2 20131009; US 2009256089 A1 20091015; US 9004094 B2 20150414

DOCDB simple family (application)
DK 2007000086 W 20070223; CA 2642307 A 20070223; EP 07702504 A 20070223; JP 2008555625 A 20070223; US 28065807 A 20070223